

ABSTRACT

The present disclosure is directed to methods and devices that use a contact interface for establishing an electrical connection with an electrical component. In certain exemplary embodiments, the contact interface of a device includes at least one loading fiber and at least one conductor having at least one contact point. The conductor(s) is coupled to a loading fiber so that an electrical connection can be established between the contact point(s) of the conductor(s) and the electrical component when the device is engaged with the electrical component. In certain exemplary embodiments, a conductor is woven with, or wound around, a loading fiber. In some exemplary embodiments, the conductor is comprised of a shaped contact and a conductive lead.

The present disclosure is also directed to methods and devices for testing the electrical integrity or functionality of an electrical component. In certain exemplary embodiments, the device includes a plurality of loading fibers, a plurality of conductors and a plurality of tensioning guides. Each conductor can be coupled to at least one loading fiber. The tensioning guides can be disposed on at least one side of each said conductor. In such embodiments, electrical connections can be established between at least a portion of the plurality of conductors and the electrical component when the device is engaged with the electrical component. At least a portion of the plurality of loading fibers may come into contact with the plurality of tensioning guides when the device is engaged with the electrical component. In one exemplary embodiment, the device comprises a burn-in socket device. In another exemplary embodiment, the device comprises a test socket device.